Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

- (Original) A method, comprising:
 substantially simultaneously reading values from a plurality of registers;
 parsing a particular instruction, and determining a select number of registers to be
 modified in the plurality of registers;
 - modifying a subset of the values in the select number of registers; and substantially simultaneously writing the values to the plurality of registers.
- 2. (Original) The method of claim 1, further comprising:
 providing a means by which an entire set of values may be collectively read or
 collectively written by instructions that operate on the entire set of values.
- 3. (Original) The method of claim 2, wherein said substantially simultaneously reading includes reading values from a plurality of predicate registers.
- 4. (Original) The method of claim 1, wherein said substantially simultaneously reading includes reading values from a plurality of Not-a-Thing (NaT) registers.

- 5. (Original) The method of claim 1, wherein said parsing a particular instruction includes parsing an Itanium instruction.
- 6. (Original) The method of claim 5, wherein the Itanium instruction selects one register to be modified.
- 7. (Original) The method of claim 5, wherein the Itanium instruction selects two registers to be modified.
- 8. (Original) The method of claim 5, wherein the Itanium instruction selects 48 registers to be modified.
- 9. (Original) The method of claim 5, wherein the Itanium instruction selects up to 63 registers to be modified.
- 10. (Original) The method of claim 1, wherein said substantially simultaneously writing includes writing the values to a plurality of predicate registers.
- 11. (Original) The method of claim 10, wherein the plurality of predicate registers includes all 63 predicate registers.
- 12-22. (Cancelled)

23. (Original) A computer readable medium containing executable instructions which, when executed in a processing system, causes the system to perform a read-modify-write operation, comprising:

substantially simultaneously reading values from a plurality of registers;

parsing a particular instruction, and determining a select number of registers to be modified in the plurality of registers;

modifying a subset of the values in the select number of registers; and substantially simultaneously writing the values to the plurality of registers.

- 24. (Original) The medium of claim 23, wherein said substantially simultaneously reading includes reading values from a plurality of predicate registers.
- 25. (Original) The medium of claim 23, further comprising:
 providing a means by which an entire set of values may be collectively read or
 collectively written by instructions that operate on the entire set of values.

26-29. (Cancelled)